IN THE SPECIFICATION

Please amend the paragraph beginning at page 7, line 2, as follows:

The existing OFDM-based DVB-T standard is composed of a [[2K]] 2k and an [[8K]] 8k mode, which means that the bandwidth used to transmit the signal is divided into either 2048 sub-carriers ([[2K]] 2k mode) or 8192 ([[8K]] 8k mode). The [[2K]] 2k mode presents some interesting features with respect to mobility. In effect, the short symbol time of this mode allows good doppler performance in mobile environments. On the other hand, the [[8K]] 8k mode gives the possibility to network planners to build a sparse, hence cheap, SFNs (Single Frequency Network). The investigations carried out on the subject showed that the introduction of a [[4K]] 4k mode would be a good trade-off between these two modes. It would give reasonably good reception for mobile users even at high driving speeds, without the need for a complicated and costly ICI (Inter Carrier Interference) cancellation scheme. It would also help to keep the cost of the network to a reasonable level. This document describes a new symbol interleaver for this [[4K]] 4k mode.

Please amend the paragraph beginning at page 8, line 17, as follows:

To create a new [[4K]] 4k mode, several elements are to be defined, but the main one is the [[4K]] 4k symbol interleaver, which is part of the inner interleaver shown in Figure 1.

Please amend the paragraph beginning at page 9, line 5, as follows:

The existing DVB-T specification already defines a symbol interleaver for the [[2K]] 2k and [[8K]] 8k modes. The purpose of the symbol interleaver is to map v bit words (v depending on the modulation scheme chosen) onto the 1 512 ([[2K]] 2k mode) or 6 048 ([[8K]] 8k mode) active carriers per OFDM symbol. The symbol interleaver acts on blocks of 1 512 ([[2K]] 2k mode) or 6 048 ([[8K]] 8k mode) data symbols. Example embodiments of

the present invention utilise the symbol interleaver 76 to provide an optimised mapping of the input data symbols fed from the connecting channels 72.1, 72.2 onto the COFDM carrier signals. An example of the symbol interleaver 76 for effecting mapping of the input data symbols onto the COFDM carrier signals is shown in Figure 3.

Please amend the paragraph beginning at page 11, line 10, as follows:

A schematic block diagram of the algorithm used to generate the permutation function H(q) is represented in Figure 5 for the [[2K]] 2k mode and in Figure 6 for the [[8K]] 8k mode.

Please amend the paragraph beginning at page 12, line 14, as follows:

In summary for the 2k and 8k modes an (N_r - 1) bit word R'_i is defined, with $N_r = \log_2 M_{max}$, where $M_{max} = 2\ 048$ in the [[2K]] 2k mode and $M_{max} = 8\ 192$ in the [[8K]] 8k mode, using a LFSR (Linear Feedback Shift Register).

Please amend the paragraph beginning at page 12, line 17, as follows:

The polynomials used to generate this sequence are as follows:

[[2K]] 2k mode: $R'_i[9] = R'_{i-1}[0] \oplus R'_{i-1}[3]$

[[8K]] 8k mode: $R'_i[11] = R'_{i-1}[0] \oplus R'_{i-1}[1] \oplus R'_{i-1}[4] \oplus R'_{i-1}[6]$

where i varies from 0 to $M_{max} - 1$

Please amend the paragraph beginning at page 12, line 25, as follows:

Table 2: Bit permutation for the [[2K]] 2k mode

Please amend the paragraph beginning at page 12, line 27, as follows:

Table 3: Bit permutation for the [[8K]] 8k mode

Please amend the paragraph beginning at page 13, line 1, as follows:

As an example, this means that for mode [[2K]] 2k, the bit number 9 of R'_i is sent in bit position number 0 of R_i.

Please amend the paragraph beginning at page 13, line 7, as follows:

An address check is then performed on H(q) to verify that the generated address is within the range of acceptable addresses: if $(H(q)<N_{max})$, where N_{max} =1512 in the [[2K]] 2k mode and 6048 in the [[8K]] 8k mode, then the address is valid. If the address is not valid, the control unit is informed and it will try to generate a new H(q) by incrementing the index i.

Please amend the paragraph beginning at page 14, line 12, as follows:

Table 1: Bit permutation for the [[4K]] mode

Please replace the Abstract on page 27 with the following Abstract shown in clean form: